

New Things Not Found in Any Book

What Your OCULIST Ought to KNOW About LIGHTING

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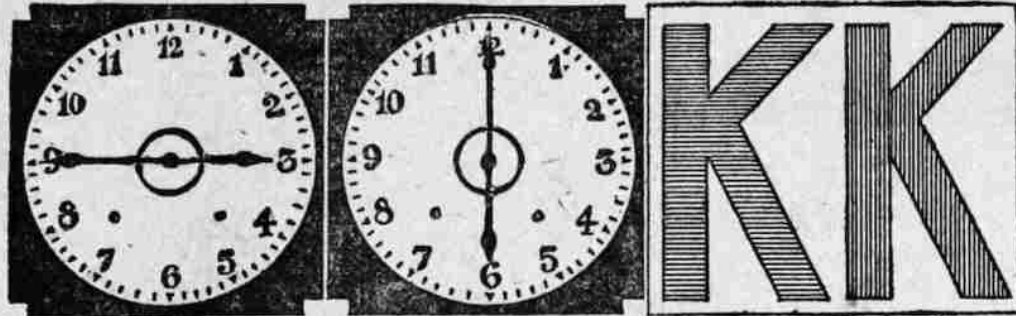
A STIGMATISM, or "near" or "far" sightedness is caused by misshapen eyeballs.

To correct the resulting distortion in vision eyeglasses must be worn. The perfectly spherical eyeball is non-stigmatic, and its possessor does not need to wear eyeglasses in order to view distant or nearby objects distinctly.

Astigmatism is very prevalent, and unless corrected by the use of properly ground lenses in the form of eyeglasses, will cause chronic headache and untold suffering. It is impossible to cure astigmatism by the wearing of glasses, and where headaches have resulted from astigmatism, the discontinuance of beneficial, correct lenses will cause their recurrence.

Sufferers from astigmatism have peculiar delusions. Some imagine that they can see better in the evening, while others claim their eyesight is sharper in the afternoon. This is because sufferers from vertical astigmatism see upright, vertical lines less distinctly than horizontal ones, and consequently the hands of the clock appear to them more distinct at 2.45 p. m. than at 6 p. m., when both hour and minute hand unite in forming a perpendicular, vertical line.

On the other hand, sufferers from horizontal astigmatism see vertical lines more distinctly than horizontal ones.



To the sufferer from vertical astigmatism the hands at 2:45 p. m. are more distinct than at 6 p. m. In horizontal astigmatism the reverse is true.

There are other forms of oblique astigmatism which are more or less prevalent, sometimes being combined with the forms mentioned. One positive way for every one to find out whether or not his eyes are astigmatic is to regard two Ks at a distance of ten feet, placing the page on the wall and arranging the lights so that the page is uniformly lighted. If the right hand letter K with the vertical lines appear blacker than the left hand K with the horizontal lines, your eyes require correction.

It is dangerous to select your own glasses and to wear those which seem to give clear vision. Lenses are entirely misleading in this respect, and often the glasses which seem to help your eyesight greatly are too powerful in their refractive or corrective influence, relieving the ciliary muscle which automatically changes the curvature and accommodation of the crystalline lens of the eye to exercise to which it has become accustomed and requires.

This cessation of activity frequently results in cataract, or the hardening of the lens of the eye until it becomes dense white and opaque to light, causing blindness.

Headache is usually nature's danger signal, warning the user that his or her glasses are causing more harm than good, and these distressing symptoms are not always in the form of what is ordinarily described as a "headache," the pain oftentimes seeming to be located at the back of the neck, or directly within the eyes.

If the lines on the right hand letter appear blacker than those on the left you have astigmatism.

Sometimes the pain seems of an acute rheumatic nature, occurring on one side of the head or the other. Many oculists make the mistake of associating the wrong cause with the effect—in their diagnosis. While 60 per cent of all functional headaches are due to astigmatism, artificial light is an important factor which is often ignored.

The brilliancy and white light of modern electric illuminants is the cause of many a headache, and perfectly normal eyes have been afflicted with eyeglasses when the proper remedy would have been the correction of the glaring lighting system which caused the injury. The up-to-date oculist in his diagnosis will inquire regarding the lighting conditions to which his patient's eyes are subjected, both in home and office—and including daylight and artificial light.

If the patient works by a window, the fact is of importance, and must be given due consideration by the competent oculist. The hours which are devoted to reading at home and the arrangement of the reading light should be determined. Also the manner in which artificial light is used in the office.

All these things have a bearing on the use of eyeglasses, and frequently the wearing of amber glasses which cut off the dangerous ultra-violet rays so prevalent in the tungsten electric lamp, will eliminate the pained, benumbed sensation of discomfort which all have experienced whose occupation requires close detail or clerical work beneath these economical but dazzling light sources.

Fundamentally the source of light should be eliminated from the field of vision, but the oculist in his diagnosis must inquire regarding the lighting abuses to which his patient has subjected his eyes, suggesting the remedy after he has decided how greatly it lies within the power of his patient to remedy the injurious conditions.

Obviously no one individual can modify the entire lighting system of an office in which he is employed, no matter how obnoxious or injurious such a system might actually be, but it is possible for the individual to effect in a measure his own ocular salvation by indulging in protective means which do not involve elaborate or offensive measures. Unfortunately, many oculists handicap the patient at the very start by the lighting arrangements of their own consulting rooms.

The test charts which are hung on the wall directly on a level with a patient's eyes seated opposite, are often so badly lighted as to make it actually difficult for the patient to determine the relative merits of various trial lenses. It is impossible for the eye to perceive an object when bright lights are directly in the field of vision.

If you find the oculist's test card illuminated by bright lamps placed at the corners of the card or in any position such that the eye is confused by bright points of light, cover the lamps with pieces of cardboard so that they are concealed from sight, and note how much more distinct the test card appears to the eye.

One trial of this will convince any oculist of intelligence regarding the stupidity of an arrangement of exposed lights which literally prevents the patient from making accurate comparisons. Another important feature to be considered when reflectors which conceal the lamps from view are used is that they redirect the light from the lamp so that the chart is evenly illuminated—i. e., just as bright at the top as at the bottom.

Test charts as a rule are arranged so that the large type is at the top of the chart and the fine type at the bottom. The oculist in selecting lenses to correct astigmatism or "near" or "far" sightedness lays particular stress upon the patient's verdict regarding the

improvement in vision resulting from the substitution of various lenses—testing one eye at a time.

Almost invariably when lights are concealed reflectors placed above the test chart, a glance at the bottom of the chart will reveal a perceptible difference in brightness as compared to the top. This defect is obviated by detaching the reflector from the bracket extension, thereby obtaining the same uniformity of light characteristic of the illuminant.

Some oculists employ a glass plate lighted from behind upon which the test letters have been painted in arrangement is satisfactory provided ground glass is not used, which reveals the location of lights and causes an uneven "spotted" lighting which is very difficult to perceive contrasts in the small type. The proper method of lighting a transparency of type is to place lamps in reflectors which direct against a white diffusing background constituting the interior back of the box, of which the glass plate the printed lines of test letters is the front. This diffusing background diffuses the light, uniting through the glass test plate, and since the lamp is covered by reflectors there are no visible irregularities in the form of blotches of light.

The usual tendency and fault of the illuminated parent test card is too excessive brightness—the plate seeming of such dazzling luminosity as to dazzle the eye, and confuse rather than assist the patient. The oculist should invariably inquire regarding the kind of artificial light with which most patients work is conducted. If an off lamp, the plate should be illuminated with less intensity of more brilliant forms of illuminants are used. Light should be avoided, since the eye is more sensitive with a mild yellow light, and a dazzling white makes the contrast between the small black type and its white background too abrupt and painful.

A device should be connected with the test plate for regulating the intensity of light by imperceptible graduations. Electrical resistances which give variations in strength of light by a series of "jumps" should be avoided.

Even eyeglasses which correct astigmatism cause immunity from eye strain and ocular discomfort resultant from exposure to glaring white light should be taken to avoid exposure by wearing shades wherever glaring lamps or shades are in visual field.

A HOTEL COMEDY

By Jackson Eltinge

JACK had fallen lame, and little golden-haired Miss Vyne wanted to carry him; but the fox terrier protested, so she let him limp on ahead. He was investigating something under the hedge when the motor passed her on the London road; then suddenly she saw him right in the car's path.

Her cry reached the young man in the driver's seat; he clapped on his brakes, and swerved. He could not, however, turn again in time; one wheel jolted into the ditch, the car toppled, and he was flung out headlong.

The dog had escaped by a hair-breadth. He barked in delight as his mistress came running; but she ignored him in favor of the figure lying motionless in the dust.

Barbara Vyne was seriously alarmed. The young man was evidently stunned, and she felt helplessly inadequate to deal with the situation. When a farmer's cart clattered into sight, she appealed to the two occupants for assistance.

"Will you take him along, please—to Gillingham's Hotel? I—I belong there, and they can look after him and fetch a doctor, and send some one for the car. Here's his luggage, too."

She glanced at the trunks as they were being transferred. According to the labels, the victim of the accident was no less a person than the Hon. Ralph Goulston; for he was certainly not Mr. Goulston's chauffeur.

"Tom'll stop and keep an eye on that there motor," suggested the elder man, preparing to drive off. "And you, miss?"

"Thank you, I'll walk," the girl answered absently.

Dismissing Jack at the corner of the road where her parents lived, she took a short cut by a footpath, and arrived at Gillingham's very soon after the cart. The hotel stood facing Beachsea promenade.

"Yes, yes; you did quite right," agreed the manager fustily. "Mr. Goulston was coming here to stay. I had a wire this afternoon while you were gone. He's on the first floor—bedroom and sitting room—No. 12. Just book that directly you come back."

"Dr. Marx is attending to him." "I'll go on duty again now. I'd like to hear his report, anyway, Mr. Penrose."

Barbara Vyne crossed to the office, and soon appeared in her usual position behind the counter. Here she sat in attendance, often from early morning till late at night, ready to answer questions, investigate complaints, and submit to various snubs from the patrons of the hotel.

The doctor's report was reassuring, but, in spite of it, she could not help wondering whether the Hon. Ralph's injury was serious. She remembered, with a slight shudder, the white face on her lap, and the closed eyes.

Next morning, however, he was able to leave his room. At once one lady with three unmarried daughters found an excuse for engaging him in conversation. When he could escape he walked slowly across to Miss Vyne's window, followed by disappointed glances. He was still pale, but his eyes lit up at sight of her.

"Why, it's you! I didn't know you were!"

"Employed here?"

"I want to thank you for taking care of me."

"And I," Miss Vyne stammered—"I want to thank you for"—She broke off confusedly. "The dog was mine," she added, in a low voice. "I think such a lot of him. It was splendid of you!"

She stopped again. He shook his head, smiling.

"I'd never have forgiven myself if I'd run over him. Fond of dogs myself, you see."

"But I feel responsible!"

"You wouldn't care to annoy me?"

"N-no," Miss Vyne agreed.

"Then don't worry over that idea. By the way, under what name have you put me down in your books? May I look, please?"

"Why, 'Goulston,'" Miss Vyne was still embarrassed. Haven't I spelt it correctly?"

"The Hon. Ralph Goulston," he read, in an undertone, leaning forward. "Oh, yes."

Their heads were close together over the page. The ladies he had deserted seemed to be growing impatient. He glanced sideways at them.

"Isn't it awful!" he groaned, in comic distress. Miss Vyne could not prevent the corners of her mouth from twitching. Then she flushed slightly.

"Here's some correspondence which has arrived for you, Mr. Goulston," she announced formally.

"Er—exactly. Thanks very much." He withdrew a pace with the envelops, colliding with the manager at his elbow.

"I received a letter from your father this morning, sir, to ask if you'd arrived."

"Ah, indeed! Well, just answer as you think best; but don't say anything about my little accident. I'm practically all right again, and he might be unnecessarily alarmed."

"I understand, Mr. Goulston. Certainly, sir."

He retreated, and the young man bent interestedly over his letters. Progressing thus, he moved in the direction of the billiard room, omitting, in an absent-minded fashion, to observe that several ladies were trying to attract his attention. Once round a corner, he passed out of their line of vision, but he could still see Miss Vyne. He made a triumphant grimace to indicate his joy at having escaped.

After dinner was over he sat in the smoking room for an hour, only emerging when the lounge was comparatively empty. Barbara Vyne was

going off duty, and he detained her on the pretext of needing postage stamps.

"I suppose you take your dog out for a run in the evenings when you have the chance?"

"Occasionally," admitted Miss Vyne stiffly.

"I'd like very much to see him again. Naturally, I'm interested in what's his name—in Jack. Will he be on view to-night? Will you allow me?"

Miss Vyne faced him. He wriggled beneath her glance.

"Does the fact that I'm very grateful to you," she asked deliberately, "justify you in insulting me?"

"Insulting? Come, come! I never intended!"

"You are suggesting that I should meet you to-night. That is an insult!"

"I protest!"

"From a man in your position to a girl in mine—yes. You forget, surely, that you're not only a visitor here, but an 'honorable.'"

"You think that matters? Very well, then, I humbly apologize."

Barbara Vyne eyed his retreating back with a shade of compunction. After all, his manner had been wholly respectful. Then she sighed once, shrugged her shoulders, and walked past Alfred toward the street.

"Nice fellow, that," commented the lift boy, in a whisper. "Gave me 'arfa-crown this mornin' when I 'oped 'e was better. I shall 'ope it again to-morrow. Good-night, miss."

"I beg your pardon, but Jack wants me to talk to him. May I?"

"Mr. Goulston!"

"I assure you this has happened quite by chance," he assured her quickly, as he rose. "You're convinced of that?"

"If you tell me so—of course."

"Then, should you wish to stay, no doubt you'd rather I went? You've only to give the word." Hat in hand, he turned as if to go.

"Any one is allowed here," observed Miss Vyne jerkily.

"But not by your side. Look how friendly Jack is!" She did not answer. "I'm rather lonely, Miss Vyne. I don't know a soul in Beachsea; and those folks at the hotel—well, they bore me to tears."

His demeanor was irreproachable. As he pleaded, Miss Vyne told her conscience that she could hardly resent his company. Presently they were conversing animatedly, and in the end he escorted her home.

Next morning the manager of Gillingham's wore a frown of disapproval.

"I hear that you were seen on the promenade last night, Miss Vyne, with a visitor staying at this hotel. If that is true, I must warn you that such conduct in an employee is extremely reprehensible. If such a thing happens again, I shall be compelled to discharge you."

Little Miss Vyne set her lips together, but assured herself that she

did not care.

Then the London newspapers were delivered, and at sight of their headlines the whole hotel forgot Miss Vyne's scandalous behavior, and became engrossed in another more interesting topic.

In fact, one item of news might have been a bombshell, judging from the effect it produced:

ROMANTIC ELOPEMENT!
VISCOUNT'S SON AND ACTRESS!
THE HON. RALPH GOULSTON'S WEDDING!

Alfred came running across, pointing with a grubby forefinger at the column.

"Ave you seen this, miss? Took place at Liverpool yesterday. Then 'oo's the chap upstairs? A fair knockout, isn't it?"

She held up the newspaper in bewilderment.

"Get back to your duties, Alfred, at once!"

The lift boy retreated hurriedly.

"Have you seen the occupier of No. 12 this morning?" the manager asked, coming up suddenly.

"No, sir," Miss Vyne blurted.

"He gives no reply to knocks at his door. If he should come down, kindly say that I require a word with him."

A whispering crowd was assembled when the subject of their conversation descended in the lift and strolled unconcernedly toward the office. Mr. Penrose swooped upon him, speaking heatedly.

"Let me ask you one question. Observe this paragraph, sir! Are you the Hon. Ralph Goulston?"

The clean-shaven young man leisurely scanned the journal thrust under his nose.

"No," he responded simply. "I never said I was. You and every one else insisted upon the fact, right from the start, and it was far too much trouble to contradict you."

"You arrived," Mr. Penrose spluttered, "in Mr. Goulston's car, with luggage bearing Mr. Goulston's labels."

"Ah!"

"Explain that if you can!"

"Later on, perhaps, there will be no need for any explanations."

"You are an impostor, sir! What is your real name?"

"Brown," observed the young man mildly; "just Brown."

"Then, Mr. Brown, I must ask you to be good enough to pay your bill and leave this hotel."

"As you wish. I presume you will allow me the luggage. After all, I can easily be arrested, if necessary. I shall only be just round the corner—at the rival establishment, the Grosvenor. Permit me to go up and pack."

He sauntered back to the lift. Around him buzzed innumerable comments.

"Good gracious! A mere adventurer! I'm so glad I never encouraged him!"

Many of such scoffing observations

reached Miss Vyne's ears, as was intended. She winced in spite of herself. Finally, the manager addressed her sharply.

Kindly make out the bill for suite No. 12 in the name of Brown."

Mechanically she obeyed, although the words and figures seemed blurred as she wrote them, and the total came different every time. She had hardly finished when Mr. Brown reappeared.

"So I'm to go," he remarked lightly. "Every one else is glad. Are you?"

"Why should I be glad? You—you preferred to injure yourself sooner than hurt my dog. I'll never forget that."

"Sticking up for me?" queried Mr. Brown, with raised eyebrows. "Even though I'm a barefaced impostor, eh?"

"Well, you haven't misled us for any—any wrong purpose. People who are kind to animals aren't bad, as a rule."

He laughed lightly, laid down some gold, and while Miss Vyne was writing a receipt, he wrinkled his forehead reflectively.

"One thing," he pointed out suddenly, "as I'm not an 'honorable' at all, but just an ordinary common person, one of your objections to associating with me falls to the ground. I'm no longer a guest here, either. So just before I go may I remark that we could now meet? That is, if you would honor me so much, Miss Vyne."

Her low reply was interrupted by the manager's advance, but Mr. Brown smiled quite contentedly as he turned to depart.

That same evening he was observed by many placidly promenading round the bandstand on the front; and later on he traversed the pier, in Miss Vyne's company. This cool disregard of public opinion was insufferable. Must it, the patrons of Gillingham's spluttered, be tolerated?

"I gave you fair warning," the manager choked next day. "If you insist upon associating with doubtful characters, Miss Vyne, you must go, that's all, at the end of the week."

The girl's protests were unavailing. She was left to her own dismal thoughts. Her parents being by no means well off, it was necessary that she should contribute to the household expenses. But now she had imprudently lost her situation, and it was always very difficult to find another.

She bent down over a ledger. Her lips trembled a little.

"I beg your pardon. May I ask a question?"

With a start she realized that some new arrivals had approached the window unnoticed. A tall young man with an abbreviated mustache was accompanied by a smartly-dressed girl.

"You wish for accommodations?" Barbara Vyne asked hurriedly.

"First," the young man stated,

"will you kindly tell me if any one of the following description is stopping at the hotel?"

She listened with increasing surprise.

"Why, you mean Mr. Brown! No, he—he's gone. He left here last night."

"Gone, has he! Do you hear that, Olga? Where did he go, though? What's his address?"

"I'm not sure that I ought!"

"Oh, you can confide in me. My name's Goulston."

The golden-haired clerk suppressed a cry.

"The Hon.—Ralph—Goulston?"

"Precisely! Brown's been staying here under my name. Oh, I'm quite aware of it!"

"You know him personally?"

At Mr. Goulston's emphatic reply, she began to relate the happenings of the previous days.

"Then No. 12 is vacant. My wife and I will take those rooms. Now I'd like a brief conversation with the manager."

Mr. Penrose, summoned to meet the real Hon. Ralph, complied almost at a run.

"Yes, yes; the fellow impersonated you, sir—and he's still in the town. Are you going to prosecute him?"

"We hardly think so," answered young Mrs. Goulston, dimpling. "We intended to invite him to dinner, as a matter of fact."

"Madam!" the manager dissented haughtily.

"If you raise any objection, we'll leave at once," her husband drawled.

Mr. Penrose realized that the presence of the couple would prove a magnificent advertisement.

"That settles it, I presume, No. 12 suite, please."

Mr. Brown visited them that same afternoon. In stupefaction his detractors saw him descend with the Hon. Ralph, arm in arm.

"Now I'll desert you for a little while, old boy," remarked Mr. Brown audibly, and stepped up to Barbara Vyne.

"Shall I explain all about it?" he suggested gently. "My friend Goulston fell in love with Miss Calthness, but the family disapproved—they'd never met her, you see. His father threatened to disown him and stop his allowance—told Ralph he was to cease all communication with the lady, and come down here for a month's exile. He even declared that he'd make sure of Ralph's arrival by consulting the manager."

Miss Vyne's lips were parted.

"So you—you took his place!"

"That's right. Goulston guessed his father would climb down and be reasonable after he was married; but he didn't want to defy the old man just then. If supplies had been cut off it would have been decidedly awkward. Besides, he'd no time to spare, if he was to rush up to Liverpool with a special license, propose to Miss Calthness, and persuade her not to catch the boat with the rest

of the company starting on American tour. Understand? he just managed it; but it's near thing."

"How lovely!" Miss Vyne murmured, with sparkling eyes.

"All ends happily, too. His fiancée was forgiven and blessed, and the rest of it. Yes; Ralph, lucky chap. I wish that I!"

Mr. Brown drew a long breath.

"Barbara," he whispered, "a queer place, perhaps, to ask a question, but I can't wait. You think you could make me as well?"

To the onlookers it seemed a commonplace conversation. Brown stood apparently chatting unimportant topics. From a distance little golden-haired Miss Vyne heightened color was hardly noticeable.

"But—my position!" she urged it—five minutes later. "I for a living."

"Yes; that's one advantage," she opened her eyes wide.

"My father's not like Goulston—a self-made man. He hoped I wouldn't choose any kind of girl. We haven't known other long enough? Oh, that's all on your side. Well, my why, I've loved you ever since passed you on the London road."

He rejoined his friend and they went out together. On return, he spoke to Miss Vyne hurriedly. Only one obnoxious new ring.

"Does that mean I can come late you, miss?" asked the lift with constraint.

"Alfred, I won't deceive you, does!"

"Course, I knew I never really a chance. But any'ow, good luck you, miss! An' I 'ope—if it's liberty—I 'ope you'll be pretty fortably off."

"I think so," responded Miss Vyne blushing and smiling. "His full name is Hubert Spencer Brown; and the son of Mr. Meredith Brown."

"Not—not the millionaire? Tru Whew!" Alfred whistled. "Don't the folks? Won't I, just!" he roared. "Rather! And everybody been so nasty to you—if they sing jolly small after this, won't be my fault!"

Indeed, there followed, metaphorically speaking, much weeping and gnashing of teeth. "Who'd have thought it!" was an occasional gasping comment; but he failed the majority.

Miss Vyne, forfeiting a week's pay, gave immediate notice.

"I intend